Devices for Forming Entity-Denoting Signs in Thai Sign Language

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INTRODUCTION

Thai Sign Language (TSL) is a manual/visual language used by the deaf people of Thailand. It is regarded as having the status of a natural language. TSL is not derivative of Thai, which is an oral language of hearing speakers. The aim of this paper is to investigate the underlying devices employed in forming entity-denoting signs in TSL. The formation of signs in TSL is a fascinating issue because of the limitations of the medium imposed on the language. We focus here on the notions of iconicity and arbitrariness, which bear on the formation of signs in TSL.

Since this paper is written primarily for people who may have little or no knowledge of sign language, we will not use any formal notation in representing the formational properties of signs. Rather, we will use natural language to describe their formation. Signs will be named as glosses written in capital letters. If there is more than one manifestation of a gloss, numerals will be inserted after the gloss to refer to each manifestation, for example, COCONUT1, COCONUT2. Some signs denoting fruits that are local to Thailand do not have English glosses, so we use transliterated forms as glosses, such as RAKAM, and LANGSAT. In order for readers with no knowledge of sign language to reach a better understanding, we will give a general background on the fundamental properties of sign language and how it differs from spoken language in the next section. After providing this overview, we will give some information about our informant and the data analyzed, discuss the major devices used in the formation of signs in general, and focus on the devices employed in forming the entity-denoting signs in TSL. We will conclude by discussing the implications of the findings.

GENERAL PROPERTIES OF SIGN LANGUAGES

We provide here a brief description of sign languages in general, so that the reader who has no knowledge of them will have a better understanding of what follows. Only the properties that are common to all sign languages, especially as opposed to spoken languages, will be described. The general properties of sign languages are as follows.

1. Differences between Signs and Gestures

Since signs and gestures are both visual and have the same mode of expression, i.e., the use of body parts in conveying meanings, they are often confused with each other. As Woll and Kyle (1994) point out, signs and gestures are not the same. Gestures refer to varied facial expressions or body movements that accompany speech. Unlike sign

languages, they do not have an internal complex structure. Since signs are manual/visual like human gestures but have more constraints than gestures, signs can be regarded as a subset of gestures in the same way as phonemes are a subset of human sounds. Signs in the sense of sign languages are created to replace speech entirely, while gestures are not. Signs are distinguished from gestures by having an internal structure comparable to speech and their usage is rule-governed.

2. The Body Parts Used in Producing Signs

Sign languages use various body parts in producing signs: hands, arms, torso, different parts of the face including eyes, eyebrows, lips, and cheeks. The most crucial part is the hands. This is why sign languages are sometimes called manual languages.

3. The SimultaneousNature of Sign Languages

One of the distinctive characteristics of spoken language is its more or less linear nature. That is, an utterance consists of a series of phonemes, which in turn constitute series of morphemes, words, phrases, and sentences, hierarchically. The crucial point is that a construction in each hierarchy is made up of a series of elements. In contrast, sign language is predominantly "simultaneous" in the sense that it allows the simultaneous "articulation" of more than one articulator. For example, a given sign can be articulated by using two hands and facial expression simultaneously. It could be argued that spoken languages are also simultaneous in the same way, since the use of prosodic features in speech is comparable to the use of nonmanual movements in sign languages. However, the simultaneous nature of sign language is far more extensive than in spoken language. Even the manual articulation alone is simultaneous in nature. The manual aspect of a sign can be broken down into four components: the place of articulation, the hand configuration, the hand movement, and the palm orientation. All of these four components are simultaneously present in the articulation of a single sign and each of them can express a particular meaning.

4. The Building Blocks of Sign Languages

Sign languages are similar to spoken languages in that they also consist of a hierarchical structure or "building blocks" comparable to spoken languages. The terminology used in spoken languages is adopted for use in describing the structure of sign languages, namely, phonology, morphology, and syntax. Even though the elements that make up sign languages are entirely different in nature from those in spoken languages, these terms can be used in the multilevel description of sign languages, since they are employed in an analogous way.

5. The Non-Universality of Sign Languages

There is often a misconception that sign languages are largely universal because of their highly iconic properties. The fact that has already been well established is that sign

languages are not universal. Sign languages throughout the world are similar to spoken languages in that all of them have a few modality-specific characteristics that are considered universal, but each sign language does have some specific characteristics of its own. It is unlikely that deaf people throughout the world can understand one another well if they use their own sign languages.

DEVICES FOR FORMING LEXICAL SIGNS

It is well established that one of the modality-specific features that make sign languages distinct from spoken language is that sign languages are closely associated with visual imagery. In other words, sign languages are presumably more pictorial and, therefore, more iconic than spoken languages. This is not surprising, since objects in the external world tend to have more visual than auditory associations. The important role of iconicity in sign languages has been thought to make sign languages distinctive from spoken languages (Woll & Kyle, 1994). Klima and Bellugi (1979) claim that about 50% of basic sign vocabulary appears to be iconic. In the light of this, a few crucial questions arise. Is this characteristic of sign languages in conflict with de Saussure's (1959) claim about the nature of linguistic signs in human languages, which states that the bond between the signifier and the signified is arbitrary? In the case of sign languages, is it the case that the links between the signifiers and the signified are largely motivated rather than arbitrary and conventional? Does the fact that sign languages are pictorial and iconic imply that sign languages are pantomimic in nature? With regard to events, are signs mimes in the sense that they encode events by acting them out? With regard to entities, are signs pure icons in the sense that they crudely represent objects in the external world? These questions can be answered after discussing in detail the devices employed in forming signs in TSL.

It is found that there are two major devices used in the formation of entity-denoting signs in TSL, namely, the use of iconic devices and the use of fingerspelling. An iconic device refers to a type of sign-formation device that is based on pictures or images that signers see or perceive in articulating signs. Mandel (1977) investigates the different iconic devices used in forming signs in American Sign Language (ASL) and proposes a comprehensive theory of basic iconic devices of ASL. According to Mandel's theory, iconic devices can be classified by two criteria. The first criterion, which is based on the work of Battison (1971) and the studies edited by Schlesinger and Namir (1970), involves the nature of the relationship between a sign and its referent. The second criterion is concerned with the manner in which an image comes to be present in a sign. The classifications of sign-formation devices based on these two criteria are discussed below.

Iconic devices can be classified into two major types on the basis of the nature of the relationship between a sign and the sign's referent, i.e. metonymic and nonmetonymic relationships to its referent. These two types of relationship between signs and their referents are defined below.

1. Nature of the Relationship between a Sign and its Referent

a. Metonymic Relationships between Signs and their Referents

A metonymic relationship between a sign and its referent obtains when the sign's picture is not that of the referent itself, but of something associated with it. A sign that is metonymically iconic with respect to its referent uses a picture of an object that is associated in some way with the referent. In other words, a metonymically iconic sign refers to something else that is related to the object referred to; it does not directly refer to the object itself. Some examples of ASL signs with metonymic relationships include THINK, which is signed by touching the extended forefinger to the forehead, and OLD, which is signed by pulling the fist down from the chin. The picture present in the sign THINK is the forehead, which is apparently associated with thinking. As for OLD, the action of pulling the fist down from the chin represents stroking one's long beard, which is naturally associated with an old man. These two signs use the pictures of something else associated with their referents.

b. Non-metonymic Relationships between Signs and their Referents

This relationship between a sign and its referent obtains when the sign's picture is that of the object referred to by the sign itself, not of something else associated with the referent of the sign. In this type of relationship, the transfer of meaning from referent to sign is not mediated by the relation of metonymy. Rather, the meaning of the referent is directly represented by the picture of the referent. In other words, signs with direct relationships to their referents directly represent the pictures of the objects referred to, as in TREE and FOLLOW in ASL. In TREE, the right elbow is placed on the left spread hand with the extended thumb ("B"-hand), the right forearm being held upright with its wrist straight and all the fingers extended, spread out, and wiggling slightly. The sign FOLLOW is articulated by a fist following another fist. In these two examples, the pictures exhibited by the signs directly reflect the pictures of the objects referred by the signs themselves.

Mandel (1977) proposes three terms for naming different aspects of an iconic sign of every type. The object whose picture is associated with the object referred to by the sign, or the object whose picture is described by the sign, is called the "base" of the sign. For example, in the case of the metonymically iconic signs OLD and THINK, the beard and the forehead are the bases of these two signs respectively. The iconic sign itself is called an "icon" and the pictorial value of the base is called the "image."

2. Types of Devices for Forming Signs

Devices for forming signs can be classified into two major types by considering the manner in which a picture comes to be present in a sign. This criterion is concerned with the nature of the relationship between the sign and the base. The two major devices for sign-formation that are classified by this criterion are "presentation" and "depiction," which can be further classified into subtypes as below.